

No. 24-1365

---

**UNITED STATES COURT OF APPEALS  
FOR THE FEDERAL CIRCUIT**

---

CPC PATENT TECHNOLOGIES PTY LTD.,

*Appellant,*

v.

APPLE INC.,

*Appellee.*

---

Appeal from the United States Patent and Trademark Office, Patent Trial and  
Appeal Board, No. IPR2022-00600

---

**APPLE INC.'S RESPONSE BRIEF**

---

BRIAN R. MATSUI  
SETH W. LLOYD  
NOAH PRILUCK\*  
MORRISON & FOERSTER LLP  
2100 L Street NW, Suite 900  
Washington, DC 20037  
Tel.: (202) 887-6946  
SLloyd@mofo.com

*Counsel for Apple Inc.*

\*Admitted only in Iowa and Nebraska.  
Practice supervised by principals of the firm  
admitted to the DC Bar

JULY 10, 2024

---

**Claim 1 of U.S. Patent No. 8,620,039**

1. A method of enrolling in a biometric card pointer system, the method comprising the steps of:  
receiving card information;  
receiving the biometric signature;  
defining, dependent upon the received card information, a memory location in a local memory external to the card;  
determining if the defined memory location is unoccupied;  
and  
storing, if the memory location is unoccupied, the biometric signature at the defined memory location.

## CERTIFICATE OF INTEREST

Counsel for Apple Inc. certify under Federal Circuit Rule 47.4 that the following information is accurate and complete to the best of their knowledge:

1. **Represented Entities.** Provide the full names of all entities represented by undersigned counsel in this case.

Apple Inc.

2. **Real Parties in Interest.** Provide the full names of all real parties in interest for the entities. Do not list the real parties if they are the same as the entities.

None.

3. **Parent Corporations and Stockholders.** Provide the full names of all parent corporations for the entities and all publicly held companies that own 10% or more stock in the entities.

None.

4. **Legal Representatives.** List all law firms, partners, and associates that (a) appeared for the entities in the originating court or agency or (b) are expected to appear in this court for the entities. Do not include those who have already entered an appearance in this court.

ERISE IP, P.A.: Jennifer C. Bailey, Adam P. Seitz

5. **Related Cases.** Other than the originating case(s) for this case, are there related or prior cases that meet the criteria under Fed. Cir. R. 47.5(a)?

Yes, see separately filed notice.

6. **Organizational Victims and Bankruptcy Cases.** Provide any information required under Fed. R. App. P. 26.1(b) (organizational victims in criminal cases) and 26.1(c) (bankruptcy case debtors and trustees).

Not applicable.

Dated: July 10, 2024

/s/ Seth W. Lloyd

---

Seth W. Lloyd

## TABLE OF CONTENTS

CERTIFICATE OF INTEREST .....	i
TABLE OF AUTHORITIES .....	iv
STATEMENT OF RELATED CASES .....	v
INTRODUCTION .....	1
STATEMENT OF THE ISSUE .....	2
STATEMENT OF THE CASE .....	2
A. Card-Based And Biometric Security Technology Was Highly Developed Before The '039 Patent's Priority Date .....	2
B. The Challenged Patent Claims Well-Known Aspects Of Security Using Card Devices And Biometric Information .....	6
C. The Board Invalidated All Challenged Claims .....	8
SUMMARY OF ARGUMENT .....	14
STANDARD OF REVIEW .....	15
ARGUMENT .....	16
THE PRIOR ART, EXPERT EVIDENCE, AND THE RECORD AS A WHOLE SUPPORT THE BOARD'S FINDINGS ON THE SOLE DISPUTED LIMITATION .....	16
A. Substantial Evidence Supports The Board's Findings About The Defining Limitation .....	16
B. CPC's Lone Factual Challenge Cannot Overcome The Tide Of Substantial Evidence .....	21
1. CPC misinterprets the record and ignores the Board's unchallenged claim interpretation in arguing that Bradford reverses the claimed steps .....	21

2.	CPC misinterprets the record and ignores the Board’s unchallenged claim interpretation in its arguments about Foss .....	25
3.	CPC’s remaining arguments also fail .....	27
CONCLUSION .....		30

## TABLE OF AUTHORITIES

	Page(s)
<b>Cases</b>	
<i>In re Gartside</i> , 203 F.3d 1305 (Fed. Cir. 2000) .....	15, 27
<i>Harmonic Inc. v. Avid Tech., Inc.</i> , 815 F.3d 1356 (Fed. Cir. 2016) .....	15
<i>Inwood Lab ’ys, Inc. v. Ives Lab ’ys, Inc.</i> , 456 U.S. 844 (1982).....	21
<i>Microsoft Corp. v. Biscotti, Inc.</i> , 878 F.3d 1052 (Fed. Cir. 2017) .....	26
<i>Roku, Inc. v. Universal Elecs., Inc.</i> , 63 F.4th 1319 (Fed. Cir. 2023) .....	15
<i>SIPCO, LLC v. Emerson Elec. Co.</i> , 980 F.3d 865 (Fed. Cir. 2020) .....	21
<i>SmithKline Beecham Corp. v. Apotex Corp.</i> , 439 F.3d 1312 (Fed. Cir. 2006) .....	25, 29
<b>Statutes</b>	
35 U.S.C. § 103 .....	15

## STATEMENT OF RELATED CASES

No appeal has previously been before this Court or any other court from this Patent Trial and Appeal Board proceeding between CPC Patent Technologies Pty, Ltd. (CPC) and Apple Inc. involving claims 1-2 and 19-20 of U.S. Patent No. 8,620,039. Claims of the '039 patent are also at issue in the following proceedings:

*CPC Patent Techs. Pty, Ltd. v. ASSA ABLOY AB*, No. 24-1492 (Fed. Cir.) (appeal of Board decision invalidating claims 1-2, 13-14, and 19-20)

*CPC Patent Techs. Pty, Ltd. v. ASSA ABLOY AB*, No. 24-1493 (Fed. Cir.) (appeal of Board decision invalidating claims 3-12 and 15-18)

*ASSA ABLOY AB v. CPC Patent Techs. Pty, Ltd.*, No. 3:22-cv-00694 (D. Conn.)

*CPC Patent Techs. Pty, Ltd. v. HID Global Corp.*, No. 6:22-cv-01170 (W.D. Tex.)

*CPC Patent Techs. Pty, Ltd. v. Apple Inc.*, No. 5:22-cv-02553 (N.D. Cal.)

## INTRODUCTION

Substantial evidence supports the Board’s finding on the sole factual issue CPC challenges on appeal. CPC is express that the “single issue” it raises is whether “substantial evidence in the cited art support[s] disclosure of” one disputed limitation. CPC.Br.16. That limitation requires “defining” a memory location for storing biometric data, like a fingerprint. CPC asserts the Board agreed with CPC that the claims require a particular order in which a new customer database entry for storing a fingerprint is created only after other steps are performed. And CPC argues the prior art performs these steps in a different order. But CPC is wrong that the Board agreed with CPC’s preferred order. Rather, the Board repeatedly disagreed. It interpreted “defining” to mean “establishing” or “setting” the memory location for storing a fingerprint in the sense of *identifying* a memory location for storing the fingerprint data, which may include establishing an existing database entry as the storage location. And the Board explicitly rejected CPC’s arguments that the challenged claims require *creating* a new memory location.

CPC never challenges that claim interpretation. Yet that interpretation disposes of CPC’s appeal arguments. For example, CPC purports to distinguish its claims from the prior art because the art involves “*existing*” database entries. CPC.Br.21-23 (CPC’s emphasis). But that distinction fails because the Board interpreted the claims to encompass using existing database entries.



CPC's substantial-evidence challenge also fails given the Board's well-supported crediting of the opinions of Apple's expert, Dr. Sears. CPC never even acknowledges the Board's endorsement of Dr. Sears' opinions, such as his opinion that the art of record shows the disputed limitation involves merely a "known way to define" a memory location. Nor does CPC challenge the Board's finding that skilled artisans would have been motivated, with reasonably expected success, to use that known way of defining a memory location in the proposed combination. The unchallenged expert testimony, combined with unchallenged Board findings, also warrants rejecting CPC's narrow factual challenge on appeal.

The Board's decision should be affirmed.

### **STATEMENT OF THE ISSUE**

Whether substantial evidence supports the Board's finding that the prior art discloses the step of "defining, dependent upon the received card information, a memory location in a local memory external to the card."

### **STATEMENT OF THE CASE**

#### **A. Card-Based And Biometric Security Technology Was Highly Developed Before The '039 Patent's Priority Date**

This appeal involves simple security technology that was already well-developed before the '039 patent. One known security method involved providing a token, like an ID card, to authenticate an individual before giving them access to a secured item (like a safe, computer system, etc.). Appx938 (¶36); Appx917-1005.

A typical ID card might have a magnetic strip that could be read by an electronic reader to authenticate a user. Appx1095; Appx1092-1100; Appx947. But token-based methods had known disadvantages, including that “tokens may be lost, stolen, forgotten, or misplaced.” Appx1093-1094; Appx938. Although requiring a personal identification number (PIN) together with the token could help with theft, a PIN could also be forgotten or discovered or guessed by an imposter. Appx1093-1094; Appx938.

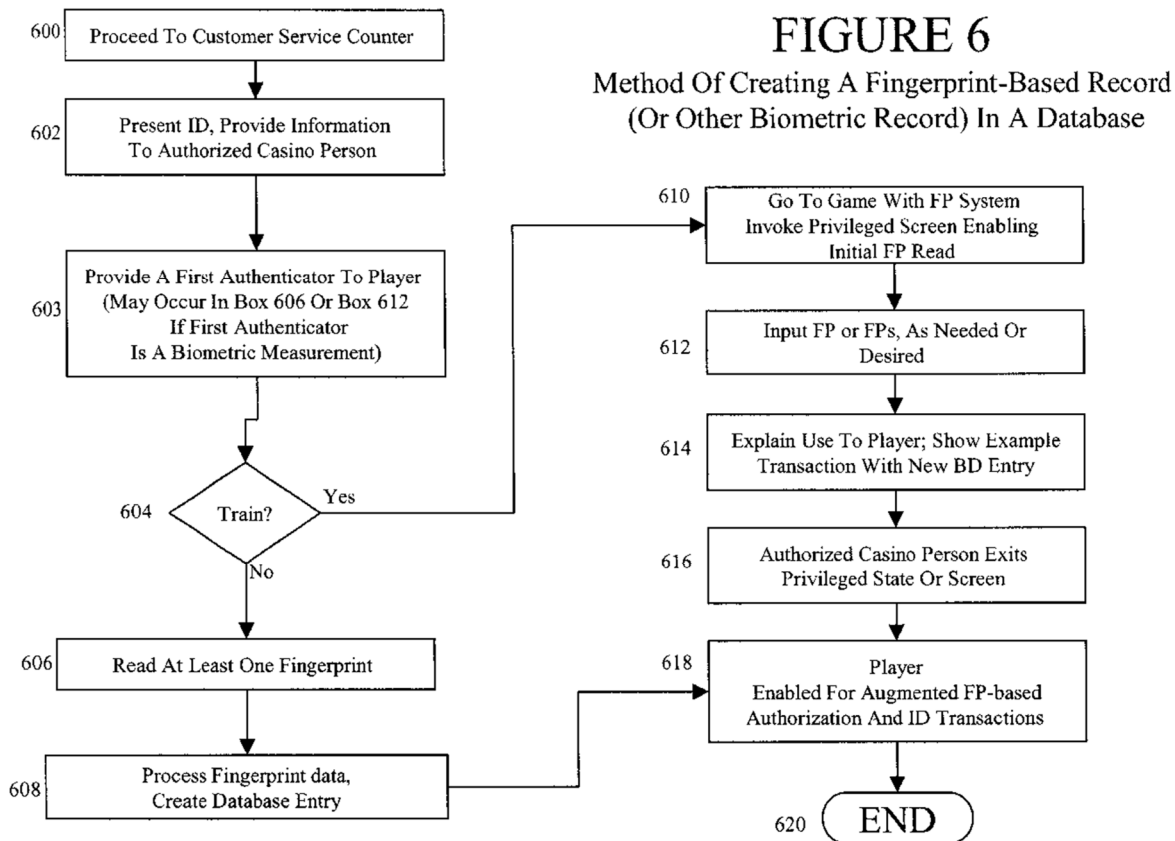
As an alternative or complement to these approaches, the prior art also taught to authenticate individuals using “unique physiological” characteristics, also called biometric information. Appx938; Appx1094. Well-known examples of biometric authentication methods included “fingerprint, retinal, palm, speech, and face recognition.” Appx939; Appx1097.

Biometric methods required users initially to go through an enrollment process. Appx939; Appx1094. During enrollment, a biometric sensor would scan the relevant physiological characteristic, like a fingerprint, to create a digital biometric signature for the user. Appx939-940; Appx1094. The biometric signature could then be stored locally or in a central database. Appx939-940, Appx944-945; Appx1094. When the person later tried to authenticate by scanning with the biometric sensor, the system would compare the new biometric data to the stored

biometric signature and grant access only if it found a match. Appx939-940, Appx942; Appx1094.

This appeal focuses on two prior art references related to this technology—Bradford and Foss—although as Apple’s expert Dr. Sears explained, the prior art was full of similar references. Appx938-954 (explaining technology background). Bradford describes authentication and access-control methods that can be used for casino gaming. Appx1006 (Abstract); Appx1006-1047. It teaches an approach using two identifiers: (1) a player ID card containing a magnetic strip with a unique data sequence; and (2) biometric information, such as fingerprints. Appx1024-1025 (col.3:6-27, 5:36-6:13, 49-64). Bradford describes associating the first identifier—the ID card—with the second—the fingerprint. For example, an authentication system reads the magnetic strip on an ID card to obtain the unique data sequence; the system then uses the sequence to retrieve a player’s corresponding entry in a database, which contains information about the player, including any biometric signature, like a fingerprint. Appx959, Appx969-971; Appx1024 (col.3:27-36, 51-58), Appx1025 (col.5:16-38); Appx1009 (Fig.3).

Bradford walks through the process of enrolling a new user in its system. This is described throughout the patent and represented visually in Figure 6:



Appx1012. As shown in steps 600-603, a casino attendant or the like first creates a database entry for a new player at a customer service counter; the entry “has fields” for storing “data, information, or pointers.” Appx1012; Appx1024 (col.3:28-31). The attendant may give the player a magnetic-strip player ID card with the unique data sequence. Appx1012, Appx1024 (col.3:10-13), Appx1029 (col.14:21-31), Appx1030 (col.15:16-24, col.16:21-25); Appx954-955, Appx976-977. The attendant and the player may then leave the counter and go to a game device in steps 610-618. Appx1012. There, the attendant helps the player take an initial fingerprint that will be stored in a field in the player’s database entry. Appx1012, Appx1030 (col.15:30-16:25), Appx1034 (col.23:36-40). After enrollment, the player’s identity

can be verified by the ID card and fingerprint. Appx1024 (col.3:50-4:2), Appx1031-1032 (col.17:5-20:29), Appx1034 (col.24:35-25:26).

Foss teaches a similar use of magnetic strip cards for financial accounts. Appx1048 (Abstract); Appx1048-1078. Foss specifically describes using cards during continued enrollment to identify a customer's existing account for storing new data. In Foss, a primary account holder may need to add a new authorized customer to a shared account. Appx1055-1056 (Fig.7-8), Appx1075 (¶86). During enrollment, the primary account holder is prompted to swipe an existing card, which Foss describes as a stored value card (think of a debit card or a grocery rewards card). Appx1075 (¶88). The system then “identifies the stored value card account associated with the existing customer”; the “account may be identified based on the data read from [the] magnetic stripe via [a] card reader.” Appx1075 (¶88) (figure reference numbers omitted).<sup>1</sup> Thus using card data, information about the additional authorized customer can be added to a memory location in the account. Appx1056.

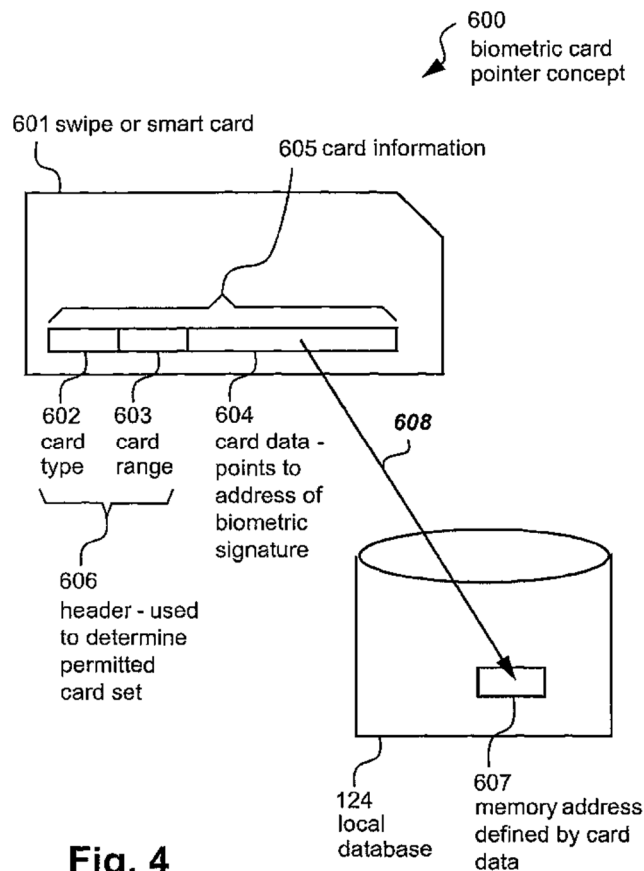
#### **B. The Challenged Patent Claims Well-Known Aspects Of Security Using Card Devices And Biometric Information**

In the face of this prior art, the challenged patent claims basic elements for enrolling in a security system using both biometrics and a card. Appx72 (col.1:13-

---

<sup>1</sup> Apple also based its obviousness challenge on Yamane, but CPC makes no arguments about Yamane on appeal. CPC.Br.7 n.2.

16), Appx77 (col.12:29-38). CPC's appeal treats claim 1 as "[r]epresentative" and makes no arguments specific to any other claim. CPC.Br.4. That claim recites simple steps, like receiving card information and a biometric signature and then storing the biometric signature in local memory. Appx77 (col.12:29-38). The patent also describes using an individual's card as a "pointer" to identify the memory location for storing the biometric signature. Appx72-73 (col.2:62-col.3:11); Appx33-34 (Board explaining same). That is, an individual's card may include "unique" information that "points" a computer system to a location in memory where the individual's corresponding biometric signature is stored (or should be stored):



**Fig. 4**

Appx68, Appx72-73 (col.2:62-col.3:11), Appx75 (col.7:24-42). The patent depicts this graphically with arrow 608 in Figure 4 pointing from the card data 604 to a memory address 607 in a database 124 used for storing the cardholder's biometric signature. Appx68.

Based on this description, claim 1 recites:

1. A method of enrolling in a biometric card pointer system, the method comprising the steps of:  
receiving card information;  
receiving the biometric signature;  
defining, dependent upon the received card information, a memory location in a local memory external to the card;  
determining if the defined memory location is unoccupied;  
and  
storing, if the memory location is unoccupied, the biometric signature at the defined memory location.

Appx79 (col.12:29-38).

### **C. The Board Invalidated All Challenged Claims**

After CPC sued Apple alleging infringement, Apple petitioned for *inter partes* review of claims 1-2 and 19-20 on a single ground: obviousness based on Bradford, Foss, and Yamane. Appx2-3. The Board instituted review and issued a final written decision invalidating all challenged claims. Appx2.

CPC aired the argument it raises on appeal three times before the Patent and Trademark Office—at institution, during the trial, and in requesting Director review. Appx28-46; Appx210-220; Appx413-419, Appx423. At each stage, CPC disputed whether Apple’s evidence showed that Bradford-Foss teaches “defining, dependent upon the received card information, a memory location in a local memory external to the card” for storing the biometric signature, i.e., the defining limitation. In repeatedly finding for Apple on the record here, the Board rejected CPC’s attempt to avoid the prior art by narrowly interpreting “defining,” made detailed findings about Bradford-Foss and the lack of any differences from claim 1, and credited Apple’s expert over CPC’s. Appx28-46; Appx413-419.

On claim interpretation, the Board resolved two related disputes about the meaning of “defining.” Appx13-14, Appx29-30, Appx36-37. *First*, CPC argued that “defining” excludes using card information to identify or point to an existing memory location for storing a biometric signature. Appx29-36. CPC asserted that “defining” instead requires using card information to “*create*” a memory location for storing the biometric signature. Appx29-36 (Board’s emphasis; quoting CPC’s counsel at Appx408 (ll.13-15); Appx356-412). The Board rejected CPC’s view about “what ‘defining, dependent upon’ means as a whole, in the context of claim 1 and ‘a method of enrolling.’” Appx30. The Board held instead that “defining” means “[w]hen the fingerprint, and then the card, is provided to the system during



enrollment, the card information provides data that establishes *where*, e.g., at what memory location or address, the system will *store* the fingerprint data.” Appx30 (Board’s emphasis; alteration omitted).

The Board based that understanding on, among other things, claim 1’s additional requirement to “determin[e] if the defined memory location is unoccupied”: “[i]f the card data somehow *created* a memory location, then there would be no reason to determine if the memory location were unoccupied.” Appx35 (Board’s emphasis). The Board also explained that the “specification uses the word ‘points’ and ‘pointer’ to describe how the memory address or location is defined.” Appx33-34 (citing Fig.4 at Appx68). The Board also relied on CPC’s own concessions “with respect to ‘defining’ that ‘the only logical use of that term is that defining means *to identify* a memory location into which the biometric data is going to be stored.” Appx35 (citing Appx407 (52:8-10)) (Board’s emphasis; brackets omitted). Given the clear claim language, the specification, and CPC’s concessions, the Board noted “the linguistic tangle Patent Owner faces in distancing the claimed ‘defining’ step from Bradford and Foss.” Appx36.

*Second*, and for similar reasons, the Board rejected CPC’s interpretation that the claims include a temporal requirement that would “exclude an existing user or player record entry from being a memory location in a database where the fingerprint is stored.” Appx36-39. CPC had argued to the Board that “a ‘temporal structure is

implicit’ in claim 1, which ‘first requires card information to be received”; ““after, and only after, that card information is received can a memory location be defined.”” Appx36 (quoting CPC at Appx254; CPC’s emphasis; brackets omitted). The Board agreed that “there is a temporal aspect to claim 1” in the sense that a fingerprint “is not *stored* until after receiving the card information.” Appx36-37 (parentheticals omitted; Board’s emphasis). But the Board explained that temporal requirement means merely that “*prior to use of the card a memory location for storing a biometric signature* is not ‘established’ or ‘set’”; “the card information establishes *where*, i.e., a memory location or address, the system is to *store* the fingerprint data.” Appx37-39 (Board’s emphasis). Nothing in claim 1 requires “that the memory location does not exist” or “excludes the existence of a database record, and even a database record including user record information in the memory location.” Appx37. The Board again cited the claim language, like its use of “comprising.” Appx37-38 (citing Appx79 (col.12:29-30)). And it relied on concessions from CPC, including that ““enrollment’ in the context of claim 1 requires the ‘receiving card information’ to *identify* a memory location for storing a biometric signature.” Appx38-39 (Board’s emphasis; citing Appx79 (col.12:29-30); CPC’s counsel at Appx405-407 (50:25-52:10)).

Having resolved the claim interpretation dispute in this way, the Board found that Bradford-Foss teaches the defining limitation. Appx39-48. The Board “note[d]

that the parties are somewhat in agreement about Bradford’s disclosure.” Appx39-40. It found that, in the first part of Bradford’s enrollment process, “a casino attendant, for example, provid[es] a player entry in the player ID database *prior* to a first use of” the “player ID card,” i.e., before the card is scanned for its unique data sequence. Appx39-40. But the Board explained that such a temporal sequence is not “excluded from the scope of claim 1” under the adopted construction: “As we established, claim 1 does not recite, nor does ‘defining’ mean, that a memory location cannot exist prior to use of the card as [CPC] argues.” Appx40.

On the second part of Bradford’s enrollment process—when the player and casino attendant proceed to a game device to take and store a fingerprint—the Board noted that Bradford “‘is not express about how the previously-created player entry in the player ID database is located and accessed’” at the game device. Appx41 (quoting Apple at Appx115-116; emphasis omitted), Appx40 (similar).

The Board agreed with Apple and “credit[ed] Dr. Sears’ testimony” (Apple’s expert) that persons of ordinary skill would look to Foss’s express teachings to fill in what was not express in Bradford. Appx41-43. The Board “f[ou]nd Dr. Sears’ testimony credible and supported” that such skilled artisans would rely on Foss to understand the process for establishing a player’s previously created database entry as the location for adding further information, like a fingerprint. Appx41-43. The Board found that Foss teaches an “enrollment process for new additional customers”

in which an “existing customer can swipe their card” to identify the account for adding the additional customers. Appx16-18 (item number omitted); Appx42. Based on this and similar disclosures, the Board found that Foss “specifically teaches that information on a user’s ID card was a known way to define, that is to ‘establish’ or ‘set’ a memory location” where additional information about the user “would be stored.” Appx44.

According to the Board, persons of ordinary skill would have looked to Foss’s teachings because “[b]oth Foss and Bradford describe an enrollment process in which a customer’s existing database record is established as a location for storing additional information.” Appx43. The Board thus found that the Bradford-Foss combination would “include swiping the player ID card at the game device to retrieve the associated player ID entry,” which would then be used to store a player’s fingerprint. Appx42-43, Appx45. “When claim 1 is properly interpreted,” that finding meant the prior art discloses using card information to establish the memory location for storing new biometric data. Appx45-46. The Board further found that Apple had shown every other limitation disclosed and that ordinarily skilled artisans would have been motivated to combine Bradford and Foss with reasonably expected success, ultimately finding Apple had proved claim 1 was unpatentable. Appx46-58.

Although CPC did not argue the other challenged claims separately from claim 1, the Board also considered Apple's evidence and expert testimony on those claims. Appx58-61. Because it found that Apple's "arguments and Dr. Sears' testimony are consistent with Bradford's disclosure," the Board also found claims 2 and 19-20 unpatentable. Appx58-61. CPC sought Director review limited to whether the Board erroneously relied on Bradford and Foss to find the defining limitation disclosed under the Board's construction of "defining" as "sets" or "establishes." Appx414-20 & n.1. The Director denied CPC's request without opinion. Appx423.

### **SUMMARY OF ARGUMENT**

This Court should affirm because the record amply supports the Board's decision. Bradford alone discloses using magnetic ID cards with fingerprint data, as claimed. Bradford also expressly teaches to associate information from the magnetic ID card with fingerprint data so that the magnetic ID card points to a database entry for the fingerprint data. On top of that, Foss expressly describes swiping a magnetic card during an enrollment process to identify an account for adding new information about a customer. Plus, the Board credited Apple's expert, Dr. Sears, who explained based on Foss that using a card to identify where in memory to store customer information was a known way to define a memory location.

Against all this, CPC rehashes arguments that ignore the Board's unchallenged claim interpretation. It argues the prior art fails to define a memory location because the art uses an existing database entry. But the Board was express that it interpreted the claims as encompassing using pre-existing database entries. And CPC explicitly does not challenge that interpretation. Nor can CPC avoid the Board's crediting of Apple's expert, which also constitutes substantial evidence supporting the Board's findings. CPC provides no basis to disturb the Board's assessment of Apple's expert nor the Board's other well-supported findings.

### **STANDARD OF REVIEW**

Obviousness is a legal question reviewed de novo, based on underlying factual findings reviewed for substantial evidence. *Roku, Inc. v. Universal Elecs., Inc.*, 63 F.4th 1319, 1324 (Fed. Cir. 2023); 35 U.S.C. § 103. “[W]hat a reference teaches and differences between the prior art and the claims” are factual issues reviewed for substantial evidence. *Harmonic Inc. v. Avid Tech., Inc.*, 815 F.3d 1356, 1363 (Fed. Cir. 2016). The “substantial evidence” standard asks whether there is more than “a mere scintilla of evidence” from which “a reasonable fact finder could have arrived at the agency’s decision.” *In re Gartside*, 203 F.3d 1305, 1312 (Fed. Cir. 2000). “[T]he possibility of drawing two inconsistent conclusions from the evidence does not prevent an administrative agency’s finding from being supported by substantial evidence.” *Id.* (quoting *Consolo v. Fed. Mar. Comm’n*, 383 U.S. 607, 620 (1966)).

## ARGUMENT

### THE PRIOR ART, EXPERT EVIDENCE, AND THE RECORD AS A WHOLE SUPPORT THE BOARD’S FINDINGS ON THE SOLE DISPUTED LIMITATION

In CPC’s own words, its appeal raises a “single” issue: whether “substantial evidence in the cited art support[s] disclosure of the limitation, ‘defining, dependent upon the received card information, a memory location in a local memory external to the card,’” i.e., the defining limitation. CPC.Br.16 (quoting ’039 patent); CPC.Br.3 (same in issue statement). Because CPC’s narrow factual challenge fails to show a lack of substantial evidence for the Board’s findings on the defining limitation, particularly under the Board’s now-unchallenged interpretation of that limitation, the Court should affirm.

#### A. Substantial Evidence Supports The Board’s Findings About The Defining Limitation

The record is full of evidence supporting the Board’s findings that the prior-art combination discloses the defining limitation. The Board’s interpretation of that limitation—uncontested on appeal—requires two things. Appx36. First, during an enrollment process “card information and [a] fingerprint” or other “biometric signature” are received. Appx36. Second, “the card information provides data that establishes *where*, i.e., at what memory location or address, the system will *store* the fingerprint data.” Appx36 (Board’s emphasis), Appx30 (same). The limitation thus encompasses using card information to “identify[] a memory location (among

preexisting memory locations/addresses within [a] preexisting player ID database) and establish[] that memory location as the memory location where new biometric data, e.g., a player's fingerprint, is going to be stored.” Appx45; *see* Appx13, Appx32, Appx35, Appx36, Appx37 (similar).

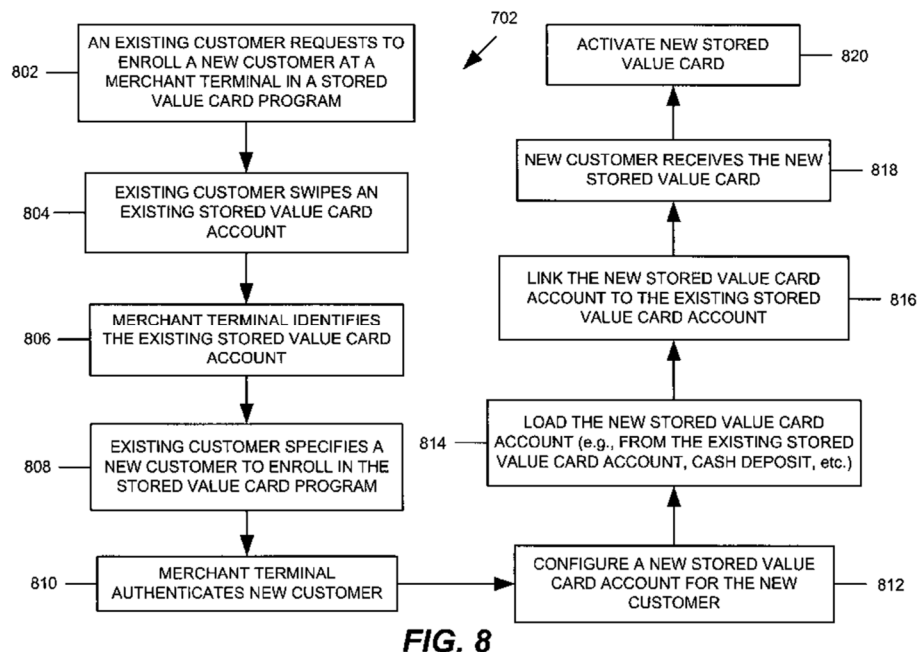
The Bradford-Foss combination teaches this limitation as construed. To recap, the Board's reasoning from the references is straightforward. Bradford describes a two-part authentication process using magnetic card information and fingerprint data. During enrollment, a casino attendant enters some of a customer's information in a database and gives the customer an ID card. The customer and attendant then move to a game machine, which has the reader needed for recording the customer's fingerprint and storing it in the database. Storing the fingerprint requires some way to identify at the game machine the customer's database entry in memory. Foss teaches the obvious, and well-known way—scan the customer's ID card and use info on the card to identify where to store new information about the customer in a database. Appx14-18, Appx39-46. The prior art's express disclosures, and statements from Apple's expert Dr. Sears, support every part of that reasoning.

Take Bradford. There is no dispute that Bradford describes a “system and method” that “us[es] two authenticators to identify a player in a gaming environment”: an ID card with a magnetic strip containing a unique data sequence; and a fingerprint or other type of biometric identifier. Appx1006 (abstract),



Appx1024-1025 (col.3:6-27, col.5:36-6:13, 49-64); Appx14-16 (Board finding same). Nor is there any dispute that Bradford's enrollment process proceeds in two parts, with "initial data" entered at a "customer service counter" where a customer is also given an ID card, and then later a "biometric" fingerprint scan is taken at a game device. Appx1029 (col.14:21-27), Appx1030 (col.16:21-31); CPC.Br.9 (recognizing same). Bradford is similarly express that the fingerprint data will be stored in a multi-field database entry by "associating the data" with data from the ID card. Appx1024 (col.3:28-31), Appx1030 (col.16:40-43); Appx1012; CPC.Br.9 (again recognizing same). Thus, as Dr. Sears summed things up for the Board: "Bradford teaches that during enrollment a player's entry is created and stored with first authenticator data, the player is provided a player ID card with the first authenticator data, the casino attendant and player move to a game device for training and entry of the player's fingerprint information, and the fingerprint data is made part of the player's ID entry in the player ID database." Appx975-976 (parenthetical and italics omitted).

Foss's teachings are equally clear in supporting the Board. Foss describes continuing an enrollment process for a customer who wishes to add new information to an existing account, like a new authorized user. Appx978 (Sears explaining same). The first step is to "swipe[] an existing stored value card" to "identif[y] the existing stored value card account" where new user data will be added:



Appx1056 (capitalization altered); Appx16-17 (Board relying on same); Appx979-981 (Sears explaining same). The Board found from this disclosure and Dr. Sears' statements "that information on a user's ID card was a known way to define, that is to 'establish' or 'set' a memory location" for "stor[ing]" additional user information, like "a fingerprint." Appx44. Far from challenging that finding on appeal, CPC concedes that, "[a]dmittedly, Foss may teach using a card to *identify* a memory location where existing information is already stored in order to store additional information there." CPC.Br.21 (CPC's emphasis).

CPC similarly does not contest the Board's well-supported finding that skilled artisans would have been motivated, with reasonably expected success, to apply Foss's teachings to Bradford. Appx42-44, Appx46-48; CPC.Br.16-23 (not challenging). In the combination, customers would continue Bradford's enrollment

process at the game machine by swiping their ID card. Appx1012 (Bradford); Appx1056 (Foss); Appx42-44, Appx46-48. Just as in Foss, information on the ID card would be used to establish where in Bradford's multi-field database to store the customer's fingerprint data. Appx1012; Appx1056; Appx42-44, Appx46-48. Indeed, Bradford already teaches using an ID card in a similar way to retrieve a customer's fingerprint data after it has been stored: a customer "presents their first authenticator [e.g., ID card] to the game device, which is used to get the associated second authenticator," e.g., the stored fingerprint data. Appx1024 (col.3:50-62). In this way, data "stored on the player ID card is acting as a memory reference that points to a memory location in a database" for fingerprint data. Appx968-969 (Sears). These prior-art teachings match the '039 patent's description of the alleged invention in which "card data acts as a memory reference which points, as depicted by an arrow, to a particular memory location at an address in the local database" for biometric data. Appx75 (col.7:24-42) (figure reference numbers omitted); Appx5 (Board relying on same).

In finding the disputed limitation disclosed given this compelling record, the Board consistently credited Apple's expert Dr. Sears' testimony. *See, e.g.*, Appx43, Appx44 (Board "credit[s] Dr. Sears' testimony," "find[s] Dr. Sears' testimony credible and supported"; "persuaded" by "Dr. Sears"). Such credibility determinations by the Board are not easily overcome, because "[d]etermining the

weight and credibility of the evidence is the special province of the trier of fact.” *Inwood Lab ’ys, Inc. v. Ives Lab ’ys, Inc.*, 456 U.S. 844, 856 (1982); *SIPCO, LLC v. Emerson Elec. Co.*, 980 F.3d 865, 871 (Fed. Cir. 2020) (applying same when reviewing Board decision).

**B. CPC’s Lone Factual Challenge Cannot Overcome The Tide Of Substantial Evidence**

CPC’s appeal fails given the wealth of evidence supporting the Board. CPC merely rehashes arguments the Board considered and reasonably rejected, based on the same evidence relied upon by the Board—Bradford, Foss, and Apple’s expert testimony from Dr. Sears. None of CPC’s arguments overcomes the deference due the Board or otherwise warrants relief.

***1. CPC misinterprets the record and ignores the Board’s unchallenged claim interpretation in arguing that Bradford reverses the claimed steps***

CPC contends that the Board and Apple’s expert agreed about a required “claimed order” for performing certain steps but in Bradford ““the steps are *reversed*”” from that allegedly required order. CPC.Br.17-19 (citation omitted; CPC’s emphasis). Every part of that argument is wrong.

*First*, neither the Board nor Apple’s expert agreed with CPC’s required order. In CPC’s telling, the claims require four steps: “1) card information is processed; 2) a biometric signature is received; 3) an enrollment process begins using a memory location defined by the card data that has been identified as ‘empty;’ [*sic*] and 4) the

biometric signature received is stored in the defined, empty memory location.” CPC.Br.17. CPC argues that the Board “agreed with that claimed order,” quoting a portion of the Board’s decision at Appx30. CPC.Br.18.

But the full Board quote shows that the Board merely read the claims to require a memory location be defined before biometric data is stored, not that the Board agreed to CPC’s four-part ordering in which the first step is processing card information before receiving a biometric signature or using the memory location. Appx30. In the Board’s words: “Considering the abstract and the specification of the ’039 patent, what ‘defining, dependent upon’ means as a whole, in the context of claim 1 and ‘a method of enrolling,’ is that during an *enrollment* process, the claimed biometric signature, e.g., a fingerprint, is not yet stored in the memory and no memory location or address has been ‘set’ or ‘established’ for the fingerprint. When the fingerprint, and then the card, is provided to the system during enrollment, the card information provides data that establishes *where*, e.g., at what memory location or address, the system will *store* the fingerprint data.” Appx30 (Board’s emphasis; ellipses omitted). The testimony from Dr. Sears that CPC quotes (CPC.Br.18) reflects the same understanding, again merely acknowledging that card data must be received and used to define a memory location before the biometric signature is stored in that location. Appx1995; Appx1981-2068. Neither the Board nor Apple’s expert articulated or adopted CPC’s four-step order.

*Second*, no evidence shows Bradford reverses any required order, let alone that CPC’s reading of Bradford is the only reasonable one from the record. CPC quotes the Board as stating that in Bradford “‘the steps are *reversed*’” and argues the Board “did not take issue with” CPC’s position on this point. CPC.Br.18-19 (quoting Appx45; CPC’s emphasis). But the Board was merely quoting CPC and followed that quote by rejecting CPC’s position: “For example, Patent Owner argues that Petitioner’s expert, Dr. Sears, ‘testified that Bradford teaches a process in which the steps are reversed.’ *We do not agree* that Dr. Sears’ testimony conflicts with claim 1.” Appx45 (quoting Appx319; citation and brackets omitted; emphasis added). The Board thus disagreed with CPC that Dr. Sears’ testimony shows Bradford is different from claim 1. Appx45.

And rightly so. CPC’s only evidence for its argument that Bradford “reversed” the claimed steps is Dr. Sears’ statement that a “‘database entry’” for a customer may be created before “‘the first authenticator’”—i.e., an ID card—is “created and provided to the user.” CPC.Br.18-19 (quoting Appx2012); *see* CPC.Br.10, 12 (citing same). But the Board repeatedly explained that its interpretation of claim 1 permits creating a database entry first: “we do not agree that claim 1 excludes the existence or creation of a player account record in a ‘memory location’ prior to receiving card information.” Appx45; Appx37 (may “includ[e] user record information in the memory location”). That is because

claim 1 focuses on “a memory location for the ‘biometric signature,’” not a player database record generally. Appx45. And it is because “‘defining’ does not mean that the memory location is created or somehow brought into existence only after ‘receiving card information’”; it means merely that “[o]nce the card is provided during enrollment, the card information provides data that establishes *where*, i.e. at what memory location address, the system is to store the fingerprint data.” Appx40, Appx45 (Board’s emphasis); *see* Appx36-39 (Board repeatedly explaining same).

This unchallenged claim interpretation disposes of CPC’s “reversed order” argument and requires affirmance. CPC.Br.16-23. For all the reasons explained, the Board correctly and at least reasonably found that Bradford-Foss discloses the exact order claim 1 requires as construed—once a casino attendant and customer are at a game machine, the customer swipes its card, and information from the card is used to establish where, i.e., at what memory location, the system should store the fingerprint. Appx44-45 (Board finding same); *supra* pp. 16-20 (explaining same).

CPC notably makes no challenge to the Board’s dispositive claim construction. It never addresses the claim text that drove the Board’s interpretation. Appx29-36. Nor does CPC respond to the specification’s description of the invention as merely requiring “point[ing]” to a memory location in a database. Appx29-36 (Board quoting specification at Appx68). CPC similarly never addresses its own prior concession that “the only logical use of the term is that defining means

to *identify* a memory location into which the biometric data is going to be stored.” Appx29-36 (Board quoting CPC’s counsel at Appx407). CPC’s statement of the issue and request for relief are likewise silent on claim interpretation. CPC.Br.3, 23. CPC thus has forfeited any challenge to that interpretation. *SmithKline Beecham Corp. v. Apotex Corp.*, 439 F.3d 1312, 1319 (Fed. Cir. 2006) (appellant forfeits issues not raised in opening brief). Regardless, for all the reasons the Board explained, the Board’s interpretation is correct. Appx29-36.

**2. *CPC misinterprets the record and ignores the Board’s unchallenged claim interpretation in its arguments about Foss***

CPC’s arguments attacking the Board’s reliance on Foss fail for similar reasons. CPC argues that Foss does not teach using card data to define a memory location or determining if a memory location is unoccupied because Foss defines a memory location based on an existing, occupied account—not received card information. CPC.Br.19-22 (citing, e.g., Appx1075 (¶¶85-86, 88), Appx1055-1056 (Fig.7-8), Appx1058 (Fig.10)).

There are multiple problems with this argument. For one, CPC forfeited this challenge. At the Board, CPC made only different arguments about Foss, such as that Foss’s teachings about multi-user account enrollment are inapplicable to Bradford’s single-user account enrollment. Appx255, Appx257; Appx42-44 (Board recognizing and addressing same). CPC now pivots to challenging a distinct factual issue, whether Foss’s memory location “was not defined dependent upon received



card information as claimed, but was instead defined based on the existing account.” CPC.Br.21. CPC forfeited that issue because it failed to raise it at the Board. *Microsoft Corp. v. Biscotti, Inc.*, 878 F.3d 1052, 1075 (Fed. Cir. 2017) (“general rule” is that issue “not raised before the Board is waived on appeal”).

The result would be the same even had CPC not forfeited this challenge about Foss. CPC’s argument again overlooks the Board’s claim interpretation, which CPC has not challenged on appeal. According to CPC, Foss is different from the claimed invention because Foss describes “add[ing] new user information to a memory location *already defined and occupied* by data pertaining to an existing user.” CPC.Br.21 (CPC’s emphasis). But just as with CPC’s arguments about Bradford, that purported distinction from the claims depends on interpreting the claims to exclude a customer account existing before card information is used to establish where to store new information. CPC.Br.20-21 (purporting to distinguish Foss because Foss uses “an existing family card account”; emphasis omitted). That distinction fails because the Board repeatedly explained that under its interpretation “the limitations of claim 1 do not exclude an existing user or player record entry from being a memory location in a database where” new information related to the user or player will be stored. Appx37, Appx40 (same), Appx45 (same). Nor does claim 1 exclude “even a database record including user record information in the memory location” before the defining step. Appx37. Claim 1 merely requires that

card information be used during enrollment “to identify a memory location” for storing new user information—that is, to “establish[] where” to “store” the new fingerprint data. Appx39 (emphasis and citation omitted).

Critically, CPC never disputes that Foss teaches all that is required under the Board’s correct claim interpretation: “Admittedly, Foss may teach using a card to identify a memory location where existing information is already stored in order to store additional information there.” CPC.Br.21 (CPC’s emphasis; parenthetical omitted). For all the reasons explained, Foss requires that concession, particularly given the Board’s express crediting of Dr. Sears’ interpretation of Foss. *Supra* pp. 18-20; Appx44-45.

Even without CPC’s concession, affirmance would be required. CPC merely tries to show that Foss supports a different conclusion from the one the Board drew. But “the possibility of drawing two inconsistent conclusions from the evidence does not prevent an administrative agency’s finding from being supported by substantial evidence.” *Gartside*, 203 F.3d at 1312 (citation omitted).

### ***3. CPC’s remaining arguments also fail***

CPC’s remaining arguments provide no basis to reverse the Board’s decision. CPC hypothesizes that “[s]hould the construction of ‘defining’ in the Challenged Claims somehow have morphed to include simply identifying where information is already stored, that construction would be inconsistent with” the claim limitation

related to storing a biometric signature “if the memory location is unoccupied.” CPC.Br.22 (similarly arguing such a construction would conflict with expert testimony). But the Board’s construction did not morph into identifying “already stored” information. The Board could hardly have been clearer that its interpretation required “identifying a memory location and establishing that memory location as the location where new biometric” data “is *going to be* stored.” Appx45 (emphasis added; parenthetical omitted). The Board repeated that or similar descriptions of its interpretation at least ten times in its decision. Appx30, Appx31, Appx33-34, Appx35, Appx36, Appx37, Appx39, Appx40, Appx43, Appx45. CPC’s strawman attack on an interpretation the Board never adopted thus has no merit.

What’s more, CPC’s argument about the different “unoccupied” memory location limitation conflates a customer database record with a specific memory location within that record. The Board found, and Bradford expressly discloses, that a customer database record in Bradford has multiple “fields containing data, information, or pointers.” Appx14-15. When a customer in Bradford proceeds to a game machine to record a fingerprint as part of enrollment, the customer generally already has a pre-existing database record with some fields occupied based on the information entered at the customer counter. Appx14-15 (Board addressing same); Appx1012. But that does not mean, as CPC wrongly assumes, that the database record already has an occupied field with the user’s fingerprint. Appx1012. Nor did

the Board ever find or suggest otherwise. Appx14-16, Appx39-46. CPC's similar argument that Foss involves an "*existing* account" that is "necessarily already occupied" is based on the same flawed premise. CPC.Br.21 (CPC's emphasis).

Finally, there is no merit to CPC's criticism of the Board for "profess[ing] confusion" about CPC's "'moving target' construction of 'defining.'" CPC.Br.22-23 (quoting Appx33). CPC's own appeal brief makes plain that the Board was more than justified in noting the "linguistic tangle Patent Owner faces in distancing the claimed 'defining' step from Bradford and Foss." Appx36. Both at the Board and on appeal, CPC has flipped between inconsistent positions, such as disputing that "defining" includes "identifying" or "'pointing to' a memory location" while simultaneously agreeing that "the only logical use of that term is that defining means to identify a memory location" for storing data. Appx28, Appx35 (citations, brackets, and emphasis omitted). Or purporting to apply the Board's construction that "defining" "mean[s] 'sets' or 'establishes'" while omitting and refusing to apply the Board's interpretation of what those terms mean in the context of the patent as a whole. CPC.Br.18-23 & n.4. Regardless, because CPC is express in raising only a substantial-evidence challenge to the Board's finding under the Board's adopted interpretation, CPC's passing criticism of a single comment in the Board's claim construction analysis is not a developed argument warranting review. *SmithKline*,

439 F.3d at 1320 (“mere statements of disagreement” do “not amount to a developed argument” sufficient for appellate review).

### **CONCLUSION**

The Board’s decision should be affirmed.

Dated: July 10, 2024

Respectfully submitted,

/s/ Seth W. Lloyd

BRIAN R. MATSUI

SETH W. LLOYD

NOAH PRILUCK\*

MORRISON & FOERSTER LLP

2100 L Street NW, Suite 900

Washington, DC 20037

Tel.: (202) 887-6946

SLloyd@mofo.com

\*Admitted only in Iowa and Nebraska.  
Practice supervised by principals of the firm  
admitted to the DC Bar

*Counsel for Apple Inc.*

## **CERTIFICATE OF COMPLIANCE**

The foregoing filing complies with the relevant type-volume limitation of the Federal Rules of Appellate Procedure and Federal Circuit Rules because the filing has been prepared using a proportionally-spaced typeface and includes 6,202 words, excluding the parts of the filing exempted by the Rules.

Dated: July 10, 2024

/s/ Seth W. Lloyd

ny-2752184